

Notice of Allowability

Application No.

09/248,158

Examiner

Bennett Celsa

Applicant(s)

YUAN ET AL.

Art Unit

1639

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Appeal Brief dated 5/18/04.
2. ☒ The allowed claim(s) is/are 1,3,5-7 and 9-20.
3. ☒ The drawings filed on 09-February 1999 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Bennett Celsa
Primary Examiner
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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Thomas R. Savitsky on 12/15/04.

The application has been amended as follows:

IN THE CLAIMS:

- I. 1 (amended) A method for analyzing a sample comprising:
 - a) providing a sample containing at least two molecular species, wherein at least one of the at least two molecular species provided is a substrate for an enzyme-catalyzed reaction or a series of enzyme-catalyzed reactions and another of the at least two molecular species is a product of the enzyme-catalyzed reaction or series of enzyme-catalyzed reactions, and at least one of the molecular species is capable of stimulating scintillation;
 - b) providing a scintillating material, wherein the surface of the scintillating material adsorbs at least one of the molecular species via a general molecular property-based binding interaction between the molecular species and the scintillating material, and where the scintillating material is stimulated to scintillate above background by at least one of the adsorbed molecular species, but is not stimulated to scintillate above background by any molecular species which is not adsorbed;

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c) measuring the scintillation emitted by the scintillation material;

wherein the adsorption of the molecular species to the scintillating material is due to a chemical or biochemical transformation of one of said molecular species into another of said molecular species and the substrate, prior to transformation, is not adsorbed on or into the scintillating material; and

d) determining the progress of or degree of completion of the molecular transformation;

wherein the reaction product of the chemical or biochemical transformation binds to the scintillating material, and at least one of the reactants of said chemical or biochemical transformation does not bind to the scintillating material.

II. Cancel claim 8.

III. Claims 9-18, line 1: change "8" to --- 1 ---.

Interview Summary Record

During a telephone conversation conducted on December 13 and 15, 2004, applicant's attorney of record (Thomas Savitsky) authorized the above Examiner's amendment, without prejudice or disclaimer, and with the express purpose of expediting the allowability of the claims subject to appeal as well as the claims which were previously withdrawn from consideration (e.g. claims 11-20) pursuant to a restriction/election requirement. The above claim amendment permits the applicants to more clearly and precisely define their invention and further distinguish their invention from the prior art of record (especially the Kasila et al. patent document). The Applicants

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expressly reserve the right to file a continuing application(s) addressing any cancelled matter resulting from the above Examiner's amendment.

The cancellation of claim 8 with the incorporation of its limitation into claim 1 serves to provide antecedent basis for the term "reactants" and "the reaction product" present in claim 1 and remove the issue of duplicity of claims 1 and 8; since the claim 1 limitation of "at least two molecular species" is defined in the specification (e.g. page 6) to possess the claim limitations of cancelled claim 8. Claims 9-18 were amended to provide proper claim dependency.

Rejoinder

Claims 11-20, previously withdrawn from consideration in response to an election of species requirement, are hereby rejoined in light of the allowability of generic claim 1.

Reasons For Allowance

The following is an examiner's statement of reasons for allowance: the prior art of record fails to disclose or suggest scintillation assays of the presently claimed invention which employ general molecular property based adsorption of a molecular species to a scintillant in a biochemical enzymatic transformation wherein the substrate, prior to transformation, is not adsorbed on or into the scintillating material and the reaction product of the chemical or biochemical transformation binds to the scintillating material to stimulate the scintillant to scintillate above background. Applicant's arguments provided in the Brief directed to the obviousness rejection of record, in view of the above-revised claims, were deemed persuasive.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

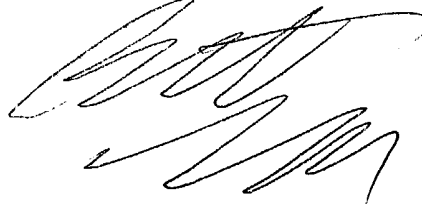
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bennett Celsa whose telephone number is 571-272-0807. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on 571-273-0811. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bennett Celsa
Primary Examiner
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BC
December 13, 2004